



TRAVEL TO WORK, SCHOOL, AND SHOPS

Victoria, October 1984





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**TRAVEL TO WORK, SCHOOL, AND SHOPS
VICTORIA, OCTOBER 1984**

INQUIRIES Inquiries concerning these statistics may be made by telephoning Melbourne (03) 63 0181; for advice on the interpretation of these statistics ask for Mrs Jean Humphrey.

Table	CONTENTS	Page
	Explanatory notes	2
	Summary of findings	4
	PERSONS WHO TRAVELLED TO WORK	
1	Modes of travel, 1976 to 1984	9
2	Main mode of travel, 1970 to 1984	9
3	Modes of travel	9
4	Persons who worked by main mode of travel	10
5	Main mode of travel by time taken	10
6	Main mode of travel by sex	11
7	Main mode of travel by number of registered motor vehicles parked overnight at households	11
8	Occupation by main mode of travel	11
9	Main mode of travel by distance travelled	12
10	Main mode of travel by departure time	13
11	Industry by main mode of travel	14
12	Main mode of travel by annual household income	14
13	Main mode of travel by work locality	14
14	Main mode of travel by distance of household from railway station	15
15	Main mode of travel by distance of household from bus stop	15
16	Main mode of travel by distance of household from tram stop	15
17	Main mode of travel by region of work location	16
18	Main mode of travel by region of home	16
19	Region of home by region of work	16
	PERSONS WHO TRAVELLED TO SCHOOL	
20	Main mode of travel, 1970 to 1984	17
21	Modes of travel	17
22	Main mode of travel by type of academic institution	17
23	Main mode of travel by distance travelled	18
24	Main mode of travel by age group	19
	HOUSEHOLD TRAVEL TO SHOPS	
25	Major shopping trip by main mode of travel	19
26	Major shopping trip day by departure time	19
27	Type of household by frequency of shopping trip	20
28	Other places visited during major shopping trip	20
	USE OF PUBLIC TRANSPORT	
29	Public transport trips	20
30	Travel to work by public transport: why car not used by main mode of travel	21
31	Travel to work: why public transport not used by main mode of travel	21
32	Travel to school by public transport: why car not used by main mode of travel	21
33	Travel to school: why public transport not used by main mode of travel	22
34	Travel to work and school: ticket type by main mode of travel	22
	VEHICLES PARKED AT HOUSEHOLDS	
35	Number of vehicles parked overnight at households	22
	Technical notes	22
A	Standard error of estimates	23
	Appendix	
A	Local government areas in each region of the MSD	24
	F	

EXPLANATORY NOTES

Introduction

This publication contains results of a survey on travel to work, school, and shops, which was conducted throughout Victoria in October 1984 as a supplementary to the Australia wide Monthly Population Survey. The supplementary survey was carried out principally at the request of the Victorian Ministry of Transport and the Melbourne and Metropolitan Board of Works.

Information was obtained about the methods of transport used to travel to work, school (or other place of study), and shops; the distance travelled and time taken; as well as on the frequency of major shopping trips, number of vehicles available for use by the household, and access to and use of public transport.

The Monthly Population Survey

Survey design

The Monthly Population Survey is based on a multi-stage sample of private and non-private dwellings. The sample covers about two-thirds of one per cent of the civilian population of Australia and includes about one-half of one per cent of Victoria's population. Information is obtained from the occupants of selected dwellings by personal interview.

The Monthly Population Survey is made up of the Labour Force Survey and, for most months of the year, a supplementary survey. The main emphasis of the Monthly Population Survey is on the regular collection of specific data on demographic and labour force characteristics of the population and, for this reason, this component is usually referred to as the Labour Force Survey. Supplementary surveys are carried out on varied topics.

Scope

All persons aged 15 years and over are included in the scope of the Labour Force Survey except: members of the permanent defence forces; certain diplomatic personnel of overseas governments customarily excluded from census and estimated populations; overseas visitors holidaying in Australia; and members of non-Australian defence forces (and their dependants) stationed in Australia.

The supplementary survey

Survey design

The survey was conducted using the sample of privately occupied dwellings in Victoria included in the Monthly Population Survey. This provided a sample of approximately 6,200 dwellings where full response was obtained. Information was obtained from any responsible adult on behalf of all other members of the household.

Questions relating to 'travel to work' were asked of all respondents aged 15 years and over, who worked on the reference day. If a

person attended more than one job on the reference day, the information obtained was in respect of the main job (the one in which most hours were usually worked). For persons who made more than one trip to their workplace, the questions referred to the first trip made for the day.

Questions relating to 'travel to school' were asked of all respondents aged 5 years and over, who attended an educational institution on the reference day. Children attending kindergarten or pre-school were not included.

Questions on 'travel to shops' were asked only once per household but they referred to all household members. Information was obtained on the household's major trip for food and grocery items (trips to obtain small amounts daily and trips made by non-household members were excluded) and whether the trip included calls to other facilities/shops at the shopping centre.

Scope

All usual residents aged 5 years and over are included in the scope of the supplementary survey except: visitors to the selected private dwellings, and residents of special dwellings (e.g. hotels, institutions, boarding houses, etc.).

Definitions

Reference day. Because it was felt that no one day would be indicative of people's travel patterns, it was decided to ask one-fifth of dwellings about 'Monday of last week', one-fifth about 'Tuesday of last week', and so on. Each dwelling was therefore assigned a particular week-day (the *reference day*) and this was the day to which most questions in the 'travel to work' and 'travel to school' sections referred. Information was thus obtained in respect of what the members of a particular household did on a specific day (the *reference day*) as opposed to what they usually do, or perhaps did on other days of the week.

Household. A group of residents of a dwelling who share common facilities and meals or who consider themselves to be a household. It is possible for more than one household to live in one dwelling, for example, where regular provision is made for groups to take meals separately and where persons consider their households to be separate.

Main mode of transport. The one used to travel the greatest distance during the trip.

Public transport. Train, bus (both Metropolitan Transit Authority and private [routed] bus lines), and tram travel. Community buses, school buses, company buses, and taxis are not regarded as public transport for the purposes of this survey.

Car. Includes trucks, vans, and utilities.

Away on business. Includes people who were away on a business trip on the reference day.

However, if the person started his/her business trip on the reference day, then the methods of transport used were coded accordingly.

Returned home only. Includes mainly shift workers who did not actually go to work on the reference day but did return from work on that day.

Time taken. The total elapsed door-to-door time. Time spent waiting for the bus, walking to the railway station, walking from the car park, etc. was included.

Distance travelled. The total distance travelled for the trip. It includes any detours etc. (such as dropping children off at school) that may have lengthened the trip.

Work locality. Where the person actually worked on the reference day. If more than one locality was involved, the locality recorded was the first work locality for the day.

Periodical ticket. One that covers more than one day's travel, e.g. weekly, monthly, yearly, etc.

Academic institution. An institution whose primary role is education, e.g. a teaching hospital is primarily a hospital and therefore not an educational institution.

Major shopping trip. That trip for food and grocery items in which the value of items bought was the greatest.

Registered motor vehicles. Includes company and government vehicles (including defence services vehicles) but excludes tractors, motor cycles/scooters, and vehicles belonging to visitors.

Annual household income. The combined annual income of all members of the household from all sources before tax or any other payments were taken out. Where a respondent was unsure of the income, a best estimate was obtained whenever possible.

Reliability of estimates

Estimates in this publication are subject to errors from two sources:

(1) **Sampling error.** Since the estimates are based on information obtained from occupants from a sample of dwellings, they may differ from the figures that would have been produced if all dwellings had been included in the survey. For more information on this topic, see the Technical Notes at the end of this publication.

(2) **Non-sampling error.** Inaccuracies may occur because of imperfections in reporting by respondents and interviewers, and errors made in the coding and processing of the data.

These inaccuracies may occur in any enumeration whether it be a full count or a sample. Every effort is made to reduce the non-sampling error to a minimum.

Comparability with data from other sources

Several factors may affect the comparability of the data in this publication with information from other sources. These include:

- (1) the aims and scope of this survey;
- (2) the wording of the questions asked; and
- (3) the way the questions were asked (e.g. personal interview rather than self-administered questionnaire).

Related publications

The ABS produces a wide range of publications relevant to travel and demographic characteristics which are available on request. A selection is shown below:

Census of Population and Housing, 30 June 1981, Summary Characteristics of Persons and Dwellings, Victoria (2436.0)

Cross-Classified Characteristics of Persons and Dwellings, Victoria (2445.0)

Working Hours Arrangements, Australia, February to May 1981 (6338.0) (irregular)

Travel to Work, School and Shops in the Adelaide Statistical Division, October 1981 (9201.4) (irregular)

For information relating to the Labour Force Survey:

The Labour Force, Victoria (6201.2) (monthly)

The Labour Force, Victorian Regions (6202.2) (quarterly)

The Labour Force, Australia (6203.0) (monthly)

Information Paper: Questionnaires used in the Labour Force Survey, Australia (6232.0) (irregular)

Current publications produced by the ABS are listed in the *Catalogue of Publications, Australia (1101.0)*, which is available free of charge from any ABS Office.

Symbols and other usages

n.a. not available

- * subject to sampling variability too high for most practical purposes. See Technical Notes at the end of this publication.

Where figures have been rounded, discrepancies may occur between sums of the component items and totals.

ERLE BOURKE
Deputy Commonwealth Statistician

SUMMARY OF FINDINGS

Introduction

Historical comparisons

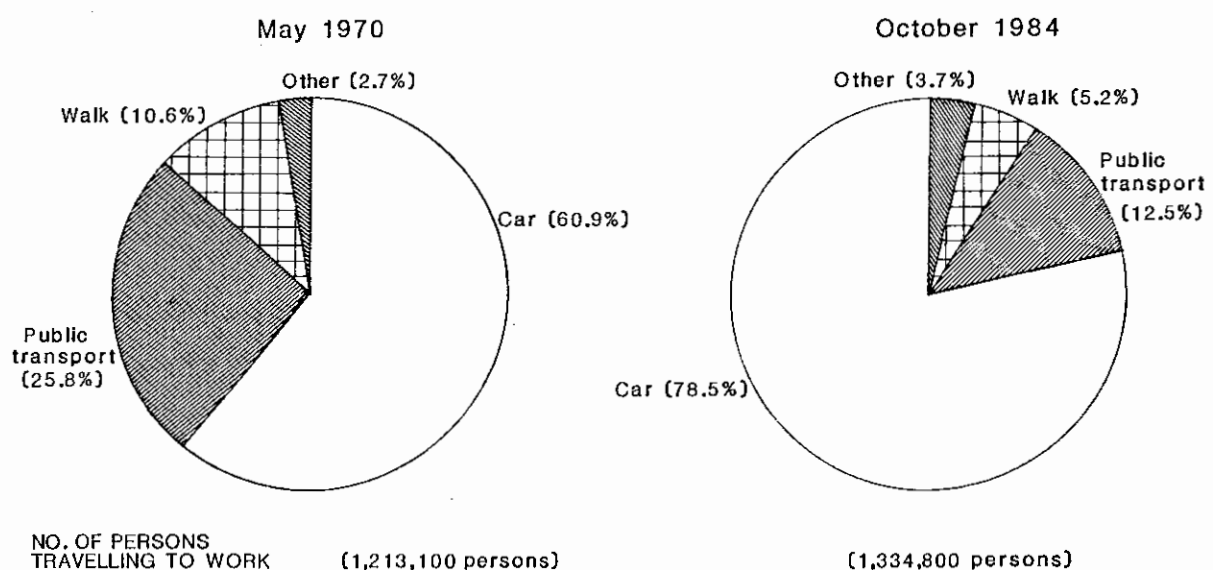
Tables 1 and 2 present data from the October 1984 survey in comparison with data from previous sources. Table 1 provides a comparison between the number of persons using each mode of travel as recorded by the 1984 survey and the last two Censuses of Population and Housing. Table 2 provides a comparison between the 1984 survey and the previous national surveys conducted in May 1970 and August 1974.

Travel to work

Main mode of travel

Most people (78.5 per cent) who travelled to work in Victoria during the survey week did so by car, (69.1 per cent as drivers and 9.4 per cent as passengers). The second main mode of travel used in the Melbourne Statistical Division (MSD) was public transport (15.8 per cent) and in the Rest of Victoria (ROV), walking (10.8 per cent). There has been a marked change in the number of Victorians using each mode of travel in the last 14 years. The percentage of people travelling to work by public transport as their main mode has declined from 25.8 per cent in May 1970 to 12.5 per cent in October 1984. There was also a decline in the proportion of people walking to work from 10.6 per cent to 5.2 per cent over the same period. People travelling to work by car increased from 60.9 per cent in May 1970 to 78.5 per cent in October 1984. (For drivers, this change was even more marked, from 48.6 per cent to 69.1 per cent respectively.)

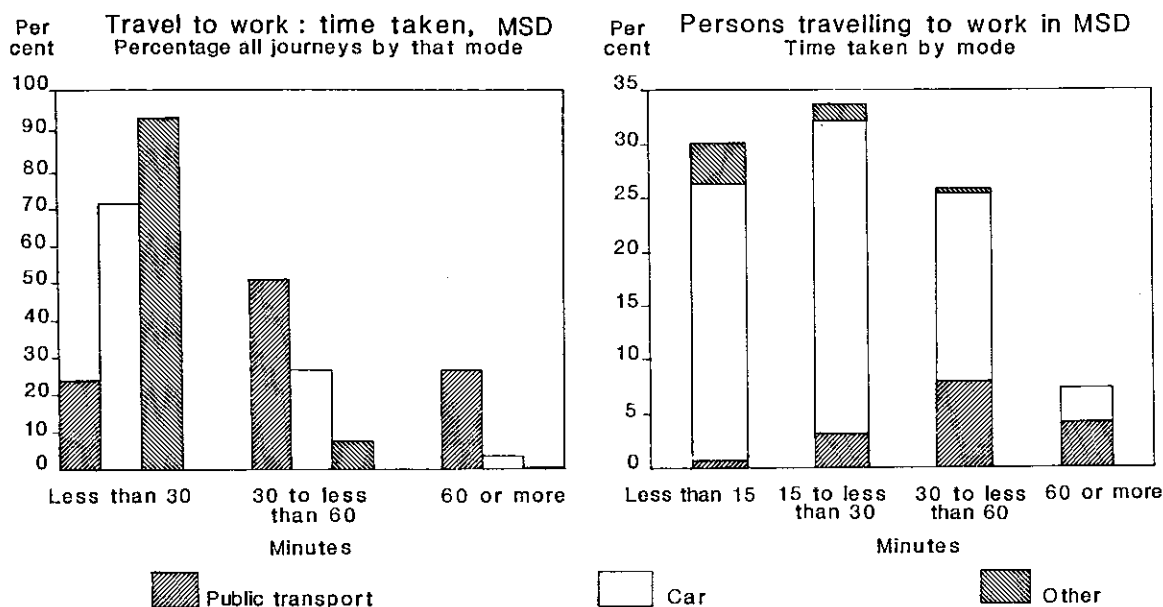
DIAGRAM 1. PERSONS WHO TRAVELLED TO WORK: MAIN MODE OF TRAVEL, VICTORIA



Travel time

Nearly two-thirds (63.4 per cent) of people travelling to work in the MSD took less than half an hour to get there. This was influenced by the dominance of car travel as 69.3 per cent of people travelling by car took less than 30 minutes to travel to work. People using public transport took longer to travel to work with 76 per cent taking thirty minutes or more. Train travellers took the longest time with 34 per cent taking an hour or more to get to work.

DIAGRAM 2. PERSONS WHO TRAVELLED TO WORK: TIME TAKEN AND MAIN MODE OF TRAVEL, MELBOURNE STATISTICAL DIVISION

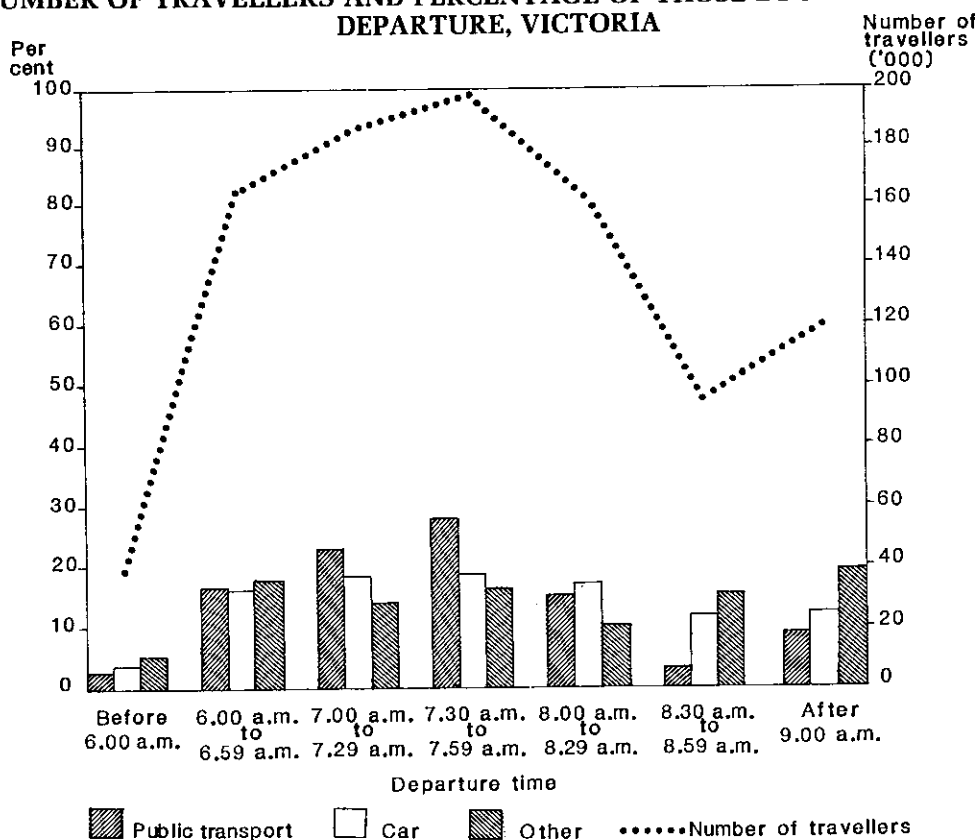


Departure time

Departures of people leaving for work were at a peak in the period 7.30 a.m. to 8.00 a.m. with 20.3 per cent of people working in the MSD and 19.7 per cent working in the ROV leaving during this period. Overall, 55.5 per cent of people who worked in Victoria during the survey week left home between 7.00 a.m. and 8.30 a.m.

Car travellers who generally spent less time travelling to work than public transport users, departed later. Nearly three-quarters (71.8 per cent) of people mainly travelling on public transport left home before 8.00 a.m. compared with 58.1 per cent of car users.

DIAGRAM 3. PERSONS WHO TRAVELLED TO WORK FROM HOME: TOTAL NUMBER OF TRAVELLERS AND PERCENTAGE OF THOSE BY MAIN MODE OF DEPARTURE, VICTORIA



Distance travelled

The percentage of people who travelled 10 kilometres or more by car as their main mode was 46.9 per cent in the MSD and 35.7 per cent for the ROV. For public transport users, the percentages increased to 57.6 per cent and 63.3 per cent, respectively.

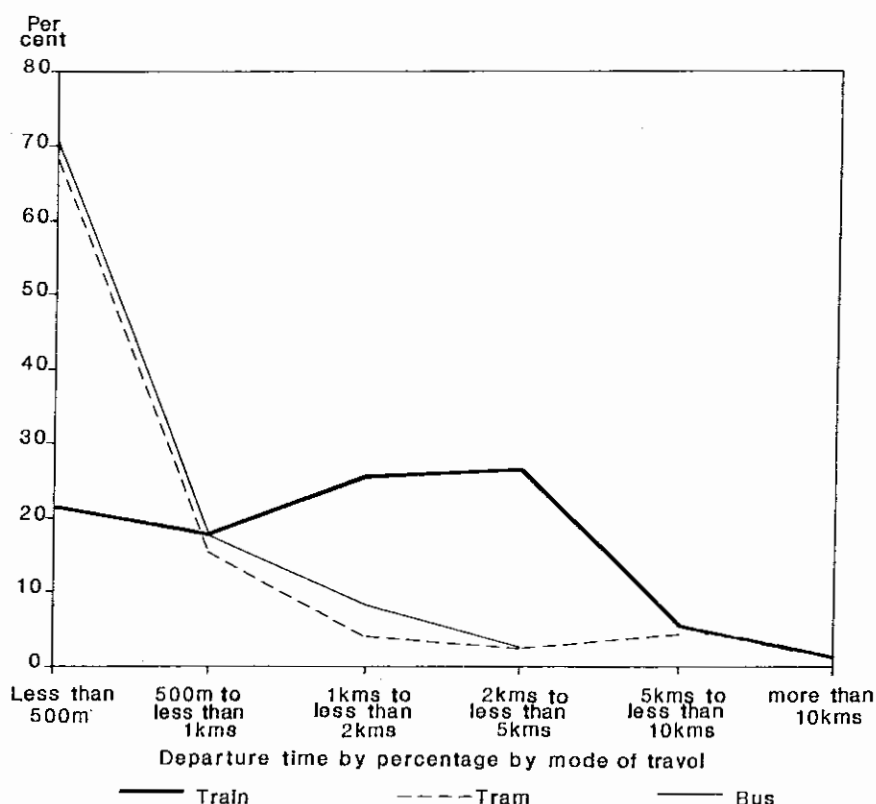
Distance from public transport

A total of 58.2 per cent of people who travelled to work in the MSD lived less than half a kilometre from a bus stop, but only 3.2 per cent of those used a bus as their main mode of travel.

Distance from railway stations appeared to have little effect on the main mode of travel to work beyond encouraging people who lived very close to use this mode. Over one-fifth (21.8 per cent) of train travellers lived within half a kilometre of a station and similarly 21 per cent of travellers to work in the MSD who lived within half a kilometre of a station travelled by train as their main mode.

Well over half (69.4 per cent) of those who travelled to work by tram lived within half a kilometre of a tram stop, although only 12.9 per cent of travellers living this close used trams as their main mode of travel.

DIAGRAM 4. PERSONS WHO TRAVELLED TO WORK IN THE MELBOURNE STATISTICAL DIVISION BY PUBLIC TRANSPORT: DISTANCE OF HOUSEHOLD FROM CLOSEST STOP OF MAIN MODE OF TRAVEL



Reasons for using public transport

The majority of people who travelled to work by public transport as their main mode did so because there was no alternative (27.6 per cent had no car available and 23.1 per cent had no licence or did not drive).

Reasons for not using public transport

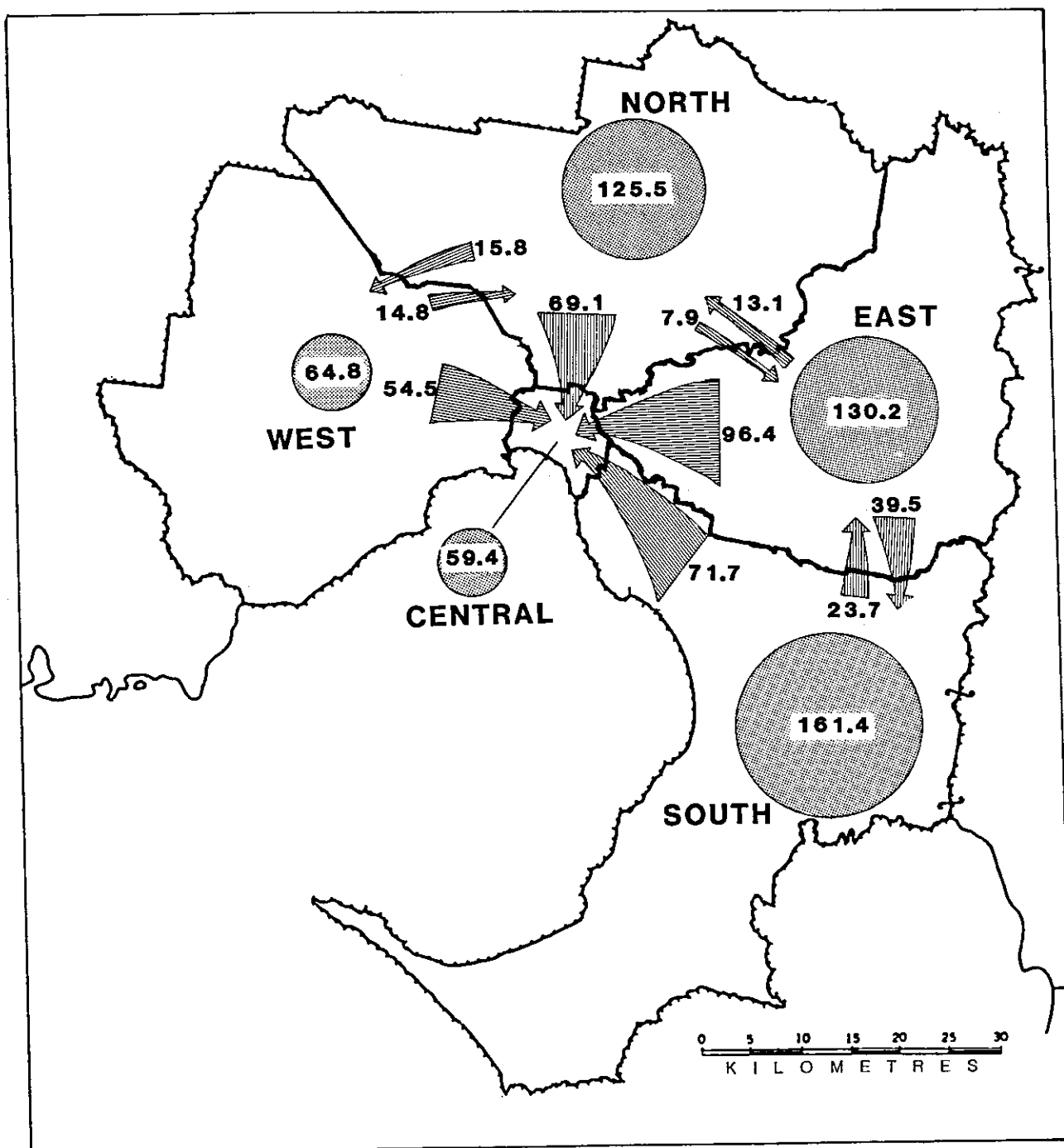
More than a quarter (27.3 per cent) of persons not using public transport said that this was because none was available. The next most common reason given (17.6 per cent) was that it would take too long to get to work if public transport was used. Only a small minority (1.5 per cent) gave the cost of using public transport as the main reason for not using it.

Region of work and home

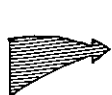
More people (57.6 per cent) who worked in the Central Business District (CBD) travelled to work by public transport than by other modes. A majority (58.9 per cent) of those travelling to work by train worked in the CBD, but only a minority (43.9 per cent for trams and 13.2 per cent for buses) of those using other forms of public transport worked there. The CBD is the only area where car travel was used by a minority (41.1 per cent) as the main mode of travel to work.

A majority of people (53.4 per cent) who worked in a region also lived there. This was true of all regions except the Central region where only 16.6 per cent of those who travelled to work there also lived there. This is only partly accounted for by the CBD being in the Central region, as the CBD only received 39 per cent (139,200) of those working in the Central region (357,200).

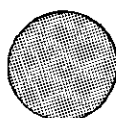
DIAGRAM 5. PERSONS WHO TRAVELLED TO WORK IN THE MELBOURNE STATISTICAL DIVISION: REGION OF HOME AND WORK



Note: For local government areas in each region of the Melbourne Statistical Division see Appendix A, page 24.



Major movements of persons ('000) travelling to work outside their home region



Number of persons ('000) travelling to work in their home region

Travel to school

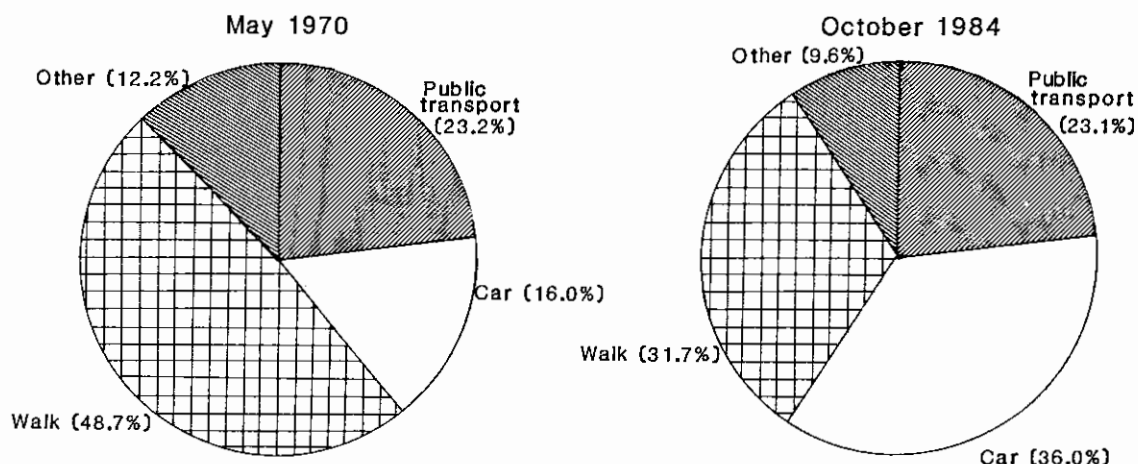
Main mode of travel

Travel by car was the most common main mode used by people travelling to school in October 1984 (36 per cent). This was a sharp increase on May 1970 when only 16 per cent travelled this way.

There was a corresponding decrease in those who walked to school. This declined from 48.7 per cent in May 1970 to 31.3 per cent in October 1984 when it was the second main mode of travel.

Use of public transport and school buses remained fairly constant at 23.1 per cent in October 1984 compared with 23.2 per cent in May 1970.

DIAGRAM 6. PERSONS WHO TRAVELLED TO SCHOOL: MAIN MODE OF TRAVEL, VICTORIA



Note: Public transport includes school buses in this diagram only

Primary and secondary students

Most primary school children were either driven (43.7 per cent) or walked (41.7 per cent) to school.

Secondary school children were more frequent users of public transport (including school buses) at 37.2 per cent. Their use of car (22.4 per cent) and walking (25.9 per cent) was much less common than primary school children's use.

Tertiary students

The bulk of tertiary students (62.4 per cent) travelled to school by car, mainly (53.8 per cent) as drivers. Most of the remainder (27.8 per cent) used public transport.

Travel to shops

Main mode of shopping trips

Most major shopping trips were done by car (81.2 per cent) with this method more common in the ROV (88.2 per cent) than the MSD (78.5 per cent). The second most used mode was walking (13 per cent) which was more common in the MSD (14.8 per cent) than in the ROV (8.2 per cent).

Timing

People departed from home on shopping trips in almost equal numbers; a.m. (50.1 per cent), and p.m. (49 per cent).

The two most common shopping days were Friday and Thursday with 33.7 per cent and 31.9 per cent of trips, respectively.

Peak departures on shopping trips occurred between 10.00 a.m. and noon for all days of the week except Saturday when 8.00 a.m. to 10.00 p.m. was the peak. The second most popular departure time was 4.00 p.m. to 6.00 p.m.

TABLE 1. TRAVEL TO WORK: MODES OF TRAVEL (a) (b), VICTORIA ('000)

Modes of travel	June 1976 census	June 1981 census	October 1984 survey
Train	133.0	114.4	112.9
Bus	78.3	59.1	46.7
Tram	66.1	57.5	47.0
Taxi	9.1	8.6	4.6
Car —			
As driver	822.9	906.3	953.1
As passenger	170.0	165.2	142.4
Motor cycle/scooter	10.7	14.4	14.4
Bicycle	18.7	25.3	28.6

(a) A person can have used more than one mode.

(b) Walking and 'other' modes have been excluded from this table as comparable figures are not available.

TABLE 2. TRAVEL TO WORK: MAIN MODE OF TRAVEL (a), VICTORIA

Main mode of travel	May 1970		August 1974		October 1984	
	'000	Per cent	'000	Per cent	'000	Per cent
Train	160.3	13.2	132.7	10.2	108.5	8.1
Bus	78.9	6.5	68.0	5.3	31.1	2.3
Tram	74.0	6.1	58.2	4.5	27.8	2.1
Car —						
As driver	589.5	48.6	726.1	56.1	922.4	69.1
As passenger	149.4	12.3	164.0	12.7	125.4	9.4
Motor cycle/scooter	4.7	0.4	9.8	0.8	13.7	1.0
Bicycle	22.5	1.9	14.0	1.1	27.6	2.1
Walk	128.4	10.6	112.0	8.6	69.9	5.2
Other	5.4	0.4	10.0	0.8	8.5	0.6
Total	1,213.1	100.0	1,294.8	100.0	1,334.9	100.0

(a) Estimates for August 1974 are based on benchmarks derived from results of the 1971 Census of Population and Housing; those for May 1970 are based on benchmarks from the 1966 Census of Population and Housing. If the May 1970 estimates were based on 1971 census benchmarks, the estimated number of persons who travelled to work would be slightly lower. Estimates for October 1984 are based on benchmarks derived from the 1981 Census of Population and Housing.

In May 1970, trainee teachers were classified as in the labour force and consequently data on their travel arrangements have been included in the table. In August 1974 and October 1984, they were classified as not in the labour force, and where relevant, the data on their travel arrangements have been included in the tables dealing with travel to school. The number of trainee teachers in May 1970 was approximately 21,000.

TABLE 3. TRAVEL TO WORK: MODES OF TRAVEL (a), OCTOBER 1984 ('000)

Modes of travel	Melbourne Statistical Division	Rest of Victoria	Total Victoria
Train	110.1	*	112.9
Bus	41.1	5.6	46.7
Tram	46.6	*	47.0
Taxi	3.8	*	4.6
Car —			
As driver	727.8	225.3	953.1
As passenger	106.9	35.5	142.4
Motor cycle/scooter	6.1	8.3	14.4
Bicycle	14.2	14.4	28.6
Walk	172.5	51.5	224.1
Other	*	*	5.0

(a) A person can have used more than one mode.

TABLE 4. PERSONS WHO WORKED: MAIN MODE OF TRAVEL TO WORK, OCTOBER 1984
(^{'000})

Main mode of travel	Melbourne Statistical Division (a)	Rest of Victoria (a)	Total Victoria
Train	106.4	*	108.5
Bus	25.5	5.6	31.1
Tram	27.8	*	27.8
Taxi	*	*	3.7
Car —			
As driver	698.9	223.6	922.4
As passenger	91.0	34.4	125.4
Motor cycle/scooter	6.1	7.6	13.7
Bicycle	13.5	14.1	27.6
Walk	34.8	35.1	69.9
Other	*	*	4.8
Total persons who travelled to work	1,010.2	324.7	1,334.9
Away on business	8.7	*	11.8
Returned home only	*	*	*
Worked at home	39.7	49.4	89.1
Total persons who worked	1,059.9	377.6	1,437.5

(a) Location of residence.

TABLE 5. TRAVEL TO WORK (a): MAIN MODE OF TRAVEL BY TIME TAKEN, MELBOURNE STATISTICAL DIVISION, OCTOBER 1984
(^{'000})

Main mode of travel	Time taken (minutes)						Total
	1 to 14	15 to 29	30 to 59	60 to 89	90 or more	Do not know	
Train	*	14.4	53.7	30.8	5.3	*	106.4
Bus	*	7.5	10.6	*	*	*	25.3
Tram	*	8.9	15.2	*	*	*	27.8
Taxi	*	*	*	*	*	*	*
Car —							
As driver	219.1	260.5	185.7	24.8	3.6	4.9	698.6
As passenger	38.5	29.1	19.4	3.5	*	*	91.0
Motor cycle/scooter	*	3.5	*	*	*	*	6.1
Bicycle	7.3	4.6	*	*	*	*	13.5
Walk	27.0	5.9	*	*	*	*	34.5
Taxi and motor cycle/scooter	*	4.9	*	*	*	*	8.9
Total	301.5	335.9	288.7	64.4	9.3	6.2	1,006.0

(a) Excludes persons who worked interstate or where locality of work was unknown, and those whose main mode of travel to work was given as 'other'.

TABLE 6. TRAVEL TO WORK: MAIN MODE OF TRAVEL BY SEX, OCTOBER 1984
(^{'000})

Main mode of travel	Melbourne Statistical Division			Rest of Victoria			Total Victoria		
	Males	Females	Persons	Males	Females	Persons	Males	Females	Persons
Train	60.9	45.5	106.4	*	*	*	62.2	46.4	108.5
Bus	10.1	15.4	25.5	*	*	5.6	13.1	18.0	31.1
Tram	10.3	17.4	27.8	*	*	*	10.3	17.4	27.8
Taxi	*	*	*	*	*	*	*	*	3.7
Car —									
As driver	489.2	209.6	698.9	158.0	65.5	223.6	647.3	275.2	922.4
As passenger	37.5	53.5	91.0	18.8	15.6	34.4	56.3	69.1	125.4
Motor cycle/scooter	5.6	*	6.1	7.6	*	7.6	13.2	*	13.7
Bicycle	12.4	*	13.5	10.7	*	14.1	23.1	4.5	27.6
Walk	15.6	19.2	34.8	23.5	11.6	35.1	39.1	30.8	69.9
Other	*	*	*	*	*	*	3.7	*	4.8
Total	645.8	364.4	1,010.2	224.1	100.6	324.7	869.8	465.0	1,334.9

TABLE 7. TRAVEL TO WORK: MAIN MODE OF TRAVEL BY NUMBER OF REGISTERED MOTOR VEHICLES PARKED OVERNIGHT AT HOUSEHOLDS, VICTORIA, OCTOBER 1984
(^{'000})

Main mode of travel	Number of registered motor vehicles					Total
	None	One	Two	Three	Four or more	
Train	12.6	45.1	32.5	11.2	7.2	108.5
Bus	5.6	15.5	6.9	*	*	31.1
Tram	6.0	14.8	4.9	*	*	27.8
Taxi	*	*	*	*	*	3.7
Car —						
As driver	*	233.3	460.4	150.3	75.0	922.4
As passenger	7.9	56.3	38.0	16.6	6.6	125.4
Motor cycle/scooter	*	*	5.1	*	*	13.7
Bicycle	*	13.2	7.2	*	*	27.6
Walk	8.6	29.8	17.5	8.3	5.7	69.9
Other	*	*	*	*	*	4.8
Total	48.3	412.7	574.6	197.1	102.2	1,334.9

TABLE 8. TRAVEL TO WORK: OCCUPATION BY MAIN MODE OF TRAVEL, VICTORIA, OCTOBER 1984
(^{'000})

Occupation	Main mode of travel								Total
	Train	Bus	Tram	Car —		Bicycle	Walk	Other (a)	
				As driver	As passenger				
Professional, technical, etc.	17.9	*	6.5	162.9	12.4	3.5	7.9	*	215.7
Administrative, executive, managerial	*	*	*	80.0	*	*	*	*	91.4
Clerical	47.4	6.6	9.0	130.1	24.0	*	6.9	*	227.4
Sales	4.0	4.9	3.7	76.4	10.5	3.6	6.6	*	110.3
Farmers, fishermen, forestry, etc.	*	*	*	32.1	*	*	14.5	*	53.8
Miners, quarrymen, etc.	*	*	*	*	*	*	*	*	*
Transport and communications	*	*	*	48.0	3.8	*	*	*	62.6
Tradesmen, labourers, etc.	19.5	8.6	4.7	292.7	51.8	11.4	15.4	8.9	412.9
Service, sport, and recreation	8.2	3.9	*	62.6	12.3	3.5	7.5	*	102.1
Not known	4.8	*	*	36.8	4.3	*	4.0	*	57.7
Total	108.5	31.1	27.8	922.4	125.4	27.6	69.9	22.1	1,334.9

(a) Includes taxi and motor cycle/scooter, and 'other' modes.

TABLE 9. TRAVEL TO WORK (a): MAIN MODE OF TRAVEL BY DISTANCE TRAVELLED, OCTOBER 1984
(^{'000})

Main mode of travel	Distance travelled							Do not know	Total
	Less than 500 m	500 m to less than 1 km	1 km to less than 2 kms	2 kms to less than 5 kms	5 kms to less than 10 kms	10 kms to less than 20 kms	20 kms or more		
MELBOURNE STATISTICAL DIVISION									
Train	*	*	*	4.2	17.1	40.1	38.3	5.8	106.4
Bus	*	*	*	4.6	8.1	6.0	*	*	25.3
Tram	*	*	*	6.3	11.3	5.4	*	*	27.8
Car —									
As driver	6.3	15.0	39.4	104.2	159.2	195.1	140.8	38.6	698.6
As passenger	*	*	8.0	22.3	15.5	19.9	14.6	7.4	91.0
Bicycle	*	*	*	*	*	*	*	*	13.5
Walk	15.6	9.2	5.4	*	*	*	*	*	34.5
Taxi and motor cycle/scooter	*	*	*	*	*	*	*	*	8.9
Total	24.1	30.5	59.1	149.2	215.7	270.1	198.6	58.9	1,006.0
REST OF VICTORIA									
Train	*	*	*	*	*	*	*	*	*
Bus	*	*	*	*	*	*	*	*	*
Tram	*	*	*	*	*	*	*	*	5.4
Car —									*
As driver	11.8	24.2	31.6	44.0	28.1	34.3	42.8	*	219.3
As passenger	*	*	5.3	7.4	4.2	5.6	7.8	*	34.4
Bicycle	*	5.3	3.8	*	*	*	*	*	13.9
Walk	25.1	5.5	*	*	*	*	*	*	35.1
Taxi and motor cycle/scooter	*	*	*	*	*	*	*	*	8.2
Total	40.7	38.4	45.8	58.6	35.4	42.4	54.2	*	318.5
TOTAL VICTORIA									
Train	*	*	*	4.2	17.1	40.1	40.4	5.8	108.5
Bus	*	*	*	6.0	9.2	7.4	*	*	30.7
Tram	*	*	*	6.3	11.3	5.4	*	*	27.8
Car —									
As driver	18.1	39.2	71.0	148.2	187.3	229.4	183.7	41.1	917.9
As passenger	*	4.3	13.3	29.7	19.6	25.5	22.4	7.4	125.4
Bicycle	*	7.8	6.5	5.4	3.8	*	*	*	27.4
Walk	40.7	14.6	8.2	4.5	*	*	*	*	69.6
Taxi and motor cycle/scooter	*	*	*	*	*	*	*	*	17.1
Total	64.7	68.9	104.9	207.7	251.1	312.5	252.8	61.9	1,324.5

(a) Excludes persons who worked interstate or where locality of work was unknown, and those whose main mode of travel to work was given as 'other'.

TABLE 10. TRAVEL TO WORK (a): MAIN MODE OF TRAVEL BY DEPARTURE TIME, OCTOBER 1984
(^{'000})

Main mode of travel	Time of departure									Total (b)
	Midnight to 4.59 a.m.	5.00 a.m. to 5.59 a.m.	6.00 a.m. to 6.59 a.m.	7.00 a.m. to 7.29 a.m.	7.30 a.m. to 7.59 a.m.	8.00 a.m. to 8.29 a.m.	8.30 a.m. to 8.59 a.m.	9.00 a.m. to 3.59 p.m.	4.00 p.m. to 11.59 p.m.	
MELBOURNE STATISTICAL DIVISION										
Train	*	3.8	19.3	27.1	29.6	14.5	*	5.3	*	104.2
Bus	*	*	4.5	*	6.5	4.1	*	*	*	24.4
Tram	*	*	*	5.9	7.8	5.5	*	*	*	26.9
Car —										
As driver	9.9	17.1	107.0	123.0	127.3	122.3	83.8	69.4	18.3	678.4
As passenger	*	*	20.8	18.7	18.8	12.5	7.2	6.0	*	90.1
Bicycle	*	*	3.9	*	*	*	*	*	*	13.1
Walk	*	*	4.4	3.5	5.0	5.0	6.5	6.3	*	33.6
Taxi and motor cycle/scooter	*	*	*	*	*	*	*	*	*	8.5
Total (b)	12.1	26.2	163.9	185.9	199.1	164.6	105.1	95.7	26.2	979.2
REST OF VICTORIA										
Train	*	*	*	*	*	*	*	*	*	*
Bus	*	*	*	*	*	*	*	*	*	5.3
Tram	*	*	*	*	*	*	*	*	*	*
Car —										
As driver	*	6.2	26.3	33.6	43.7	36.3	32.2	24.6	8.4	214.2
As passenger	*	*	5.3	8.1	5.1	4.5	4.0	4.3	*	33.9
Bicycle	*	*	*	*	*	*	*	*	*	13.9
Walk	*	*	4.6	5.2	5.3	6.0	4.9	4.6	*	33.6
Taxi and motor cycle/scooter	*	*	*	*	*	*	*	*	*	8.0
Total	4.9	8.3	39.9	53.4	61.4	51.5	44.0	36.0	11.7	311.0
TOTAL VICTORIA										
Train	*	4.0	19.5	27.8	30.8	14.5	*	5.3	*	106.3
Bus	*	*	5.6	5.0	7.6	4.7	*	3.5	*	29.6
Tram	*	*	*	5.9	7.8	5.5	*	*	*	26.9
Car —										
As driver	12.8	23.2	133.3	156.6	170.9	158.6	116.0	94.0	26.7	892.7
As passenger	*	*	26.1	26.8	24.0	17.0	11.3	10.3	4.6	124.0
Bicycle	*	*	5.9	4.5	6.0	*	*	*	*	27.0
Walk	*	*	9.0	8.7	10.4	11.0	11.4	10.9	*	67.2
Taxi and motor cycle/scooter	*	*	*	4.0	*	*	*	*	*	16.5
Total	16.9	34.5	203.9	239.3	260.4	216.1	149.1	131.6	37.9	1,290.3

(a) Excludes persons who worked interstate or where locality of work was unknown, those whose main mode of travel to work was given as 'other', and those who did not leave from home.
(b) Includes a small number of 'unknown'.

**TABLE 11. TRAVEL TO WORK: INDUSTRY BY MAIN MODE OF TRAVEL, VICTORIA,
OCTOBER 1984
('000)**

Industry	Main mode of travel								Total
	Train	Bus	Tram	Car —		Bicycle	Walk	Other (a)	
				As driver	As passenger				
Agriculture, forestry, fishing, and hunting	*	*	*	22.9	*	*	12.8	*	42.3
Mining	*	*	*	*	*	*	*	*	5.9
Manufacturing	15.2	6.5	3.9	231.6	39.7	7.1	11.5	5.3	320.8
Construction	*	*	*	63.3	5.7	*	*	*	74.4
Wholesale and retail trade	12.4	7.1	6.0	177.7	23.6	7.4	10.9	*	248.2
Transport and storage	10.9	*	*	45.2	4.4	*	*	*	68.6
Finance, property, and business services	25.5	3.6	5.9	79.7	8.9	*	*	*	127.3
Community services	12.4	4.6	*	155.7	17.7	4.5	12.7	*	213.8
Recreation, personal, and other services	4.2	*	*	33.9	7.0	*	6.1	*	57.1
Other (b)	20.2	*	4.1	73.0	9.9	*	3.6	*	118.7
Unknown	4.8	*	*	36.8	4.3	*	5.0	*	57.7
Total	108.5	31.1	27.8	922.4	125.4	27.6	69.9	22.1	1,334.9

(a) Includes taxi and motor cycle/scooter, and 'other' modes.

(b) Includes electricity, gas and water; communication; and public administration and defence.

**TABLE 12. TRAVEL TO WORK: MAIN MODE OF TRAVEL BY ANNUAL HOUSEHOLD INCOME,
VICTORIA, OCTOBER 1984
('000)**

Main mode of travel	Household income (\$)				Total
	Less than 12,000	12,001 to 30,000	30,001 or more	Unknown	
Train	4.4	54.1	46.3	3.7	108.5
Bus	4.0	16.9	8.7	*	31.1
Tram	*	15.6	7.5	*	27.8
Taxi	*	*	*	*	3.7
Car —					
As driver	42.4	458.1	373.5	48.5	922.4
As passenger	7.9	60.1	50.9	6.4	125.4
Motor cycle/scooter	*	7.1	5.5	*	13.7
Bicycle	*	14.7	8.9	*	27.6
Walk	7.9	38.3	20.6	*	69.9
Other	*	*	*	*	4.8
Total	74.8	669.0	524.5	66.5	1,334.9

**TABLE 13. TRAVEL TO WORK (a): MAIN MODE OF TRAVEL BY WORK LOCALITY,
VICTORIA, OCTOBER 1984
('000)**

Main mode of travel	Work locality					Total
	Central Business District	Other Melbourne Statistical Division	Rest of Victoria	Interstate	Unknown	
Train	63.9	44.4	*	*	*	108.5
Bus	4.1	22.2	4.4	*	*	31.1
Tram	12.2	15.6	*	*	*	27.8
Taxi	*	*	*	*	*	3.7
Car —						
As driver	45.3	655.5	211.1	4.5	5.9	922.4
As passenger	11.9	82.2	31.3	*	*	125.4
Motor cycle/scooter	*	5.6	7.4	*	*	13.7
Bicycle	*	13.0	13.9	*	*	27.6
Walk	*	33.4	35.5	*	*	69.9
Total	139.2	874.6	304.5	5.6	6.2	1,330.1

(a) Excludes persons whose main mode of travel to work was given as 'other'.

TABLE 14. TRAVEL TO WORK (a): MAIN MODE OF TRAVEL BY DISTANCE OF HOUSEHOLD FROM RAILWAY STATION, MELBOURNE STATISTICAL DIVISION, OCTOBER 1984 ('000)

Main mode of travel	Distance from railway station							Total
	Less than 500 m	500 m to less than 1 km	1 km to less than 2 kms	2 kms to less than 5 kms	5 kms to less than 10 kms	10 kms or more	Do not know	
	500 m	1 km	2 kms	5 kms	10 kms	more	know	
Train	23.6	18.6	26.8	28.2	6.5	*	*	108.3
Bus	*	*	9.7	5.5	3.5	*	*	26.3
Tram	5.8	5.8	6.5	6.1	*	*	*	27.8
Car —								
As driver	63.6	98.2	161.6	210.7	97.4	34.4	35.0	700.9
As passenger	9.9	13.6	22.1	25.5	10.7	4.3	7.8	94.1
Bicycle	*	*	3.6	*	*	*	*	13.5
Walk	5.3	8.5	8.1	7.0	*	*	*	34.1
Taxi and motor cycle/scooter	*	*	*	*	*	*	*	8.9
Total	112.4	151.8	240.4	288.7	123.1	44.3	53.1	1,013.8

(a) Excludes persons whose main mode of travel to work was given as 'other'.

TABLE 15. TRAVEL TO WORK (a): MAIN MODE OF TRAVEL BY DISTANCE OF HOUSEHOLD FROM BUS STOP, MELBOURNE STATISTICAL DIVISION, OCTOBER 1984 ('000)

Main mode of travel	Distance from bus stop							Total
	Less than 500 m	500 m to less than 1 km	1 km to less than 2 kms	2 kms to less than 5 kms	5 kms to less than 10 kms	10 kms or more	Do not know	
	500 m	1 km	2 kms	5 kms	10 kms	more	know	
Train	65.4	24.0	5.1	*	*	*	12.0	108.3
Bus	18.6	4.4	*	*	*	*	*	26.3
Tram	19.0	3.6	*	*	*	*	4.1	27.8
Car —								
As driver	396.1	160.0	52.5	12.0	4.1	6.6	69.6	700.9
As passenger	56.4	21.8	3.9	*	*	*	8.4	94.1
Bicycle	7.7	3.8	*	*	*	*	*	13.5
Walk	21.2	5.8	*	*	*	*	3.9	34.1
Taxi and motor cycle/scooter	6.0	*	*	*	*	*	*	8.9
Total	590.3	225.6	67.0	16.7	5.6	8.6	100.0	1,013.8

(a) Excludes persons whose main mode of travel to work was given as 'other'.

TABLE 16. TRAVEL TO WORK (a): MAIN MODE OF TRAVEL BY DISTANCE OF HOUSEHOLD FROM TRAM STOP, MELBOURNE STATISTICAL DIVISION, OCTOBER 1984 ('000)

Main mode of travel	Distance from tram stop							Total
	Less than 500 m	500 m to less than 1 km	1 km to less than 2 kms	2 kms to less than 5 kms	5 kms to less than 10 kms	10 kms or more	Do not know (b)	
	500 m	1 km	2 kms	5 kms	10 kms	more	know (b)	
Train	13.3	7.9	4.7	10.4	18.9	27.5	25.6	108.3
Bus	*	*	*	5.0	3.7	*	7.8	26.3
Tram	19.3	4.3	*	*	*	*	*	27.8
Car —								
As driver	89.7	47.6	38.2	62.9	93.7	221.1	147.7	700.9
As passenger	11.2	7.7	4.6	8.5	10.4	26.4	25.4	94.1
Bicycle	*	*	*	*	*	4.3	*	13.5
Walk	10.5	4.8	*	*	*	8.0	4.3	34.1
Taxi and motor cycle/scooter	*	*	*	*	*	*	*	8.9
Total	150.0	74.2	54.9	92.3	133.2	292.6	216.6	1,013.8

(a) Excludes persons whose main mode of travel to work was given as 'other'.

(b) 'Do not know' includes persons who lived outside the Melbourne Statistical Division and were not asked distance from tram stop.

TABLE 17. TRAVEL TO WORK (a): MAIN MODE OF TRAVEL BY REGION OF WORK LOCATION, MELBOURNE STATISTICAL DIVISION (MSD), OCTOBER 1984
(⁰⁰⁰)

Main mode of travel	Region of work location (MSD)					Total
	Central	North	East	South	West	
Train	88.8	4.5	4.8	5.5	4.7	108.3
Bus	8.3	7.0	5.4	3.8	*	26.3
Tram	23.6	*	*	*	*	27.8
Car —						
As driver	194.2	125.0	136.7	168.7	76.3	700.9
As passenger	28.9	18.9	12.5	22.3	11.4	94.1
Bicycle	*	3.7	*	4.3	*	13.5
Walk	9.8	8.0	5.7	7.0	3.6	34.1
Taxi and motor cycle/scooter	*	*	*	*	*	8.9
Total	357.2	169.0	170.7	216.0	100.9	1,013.8

(a) Excludes persons whose main mode of travel to work was given as 'other'.

NOTE. See map on page 7 for regions.

TABLE 18. TRAVEL TO WORK (a): MAIN MODE OF TRAVEL BY REGION OF HOME, MELBOURNE STATISTICAL DIVISION (MSD), OCTOBER 1984
(⁰⁰⁰)

Main mode of travel	Region of home (MSD)						Total
	Central	North	East	South	West	Outside MSD	
Train	8.1	22.2	27.7	32.6	15.6	*	108.3
Bus	*	8.7	6.6	5.2	*	*	26.3
Tram	11.3	7.0	5.7	*	*	*	27.8
Car —							
As driver	45.4	147.8	211.0	187.6	94.2	14.9	700.9
As passenger	6.6	23.7	21.3	24.1	14.7	3.7	94.1
Bicycle	*	*	*	4.5	*	*	13.5
Walk	9.6	7.7	6.0	7.2	3.6	*	34.1
Taxi and motor cycle/scooter	*	*	*	*	*	*	8.9
Total	84.6	221.4	284.4	265.2	136.2	22.0	1,013.8

(a) Excludes persons whose main mode of travel to work was given as 'other'.

NOTE. See map on page 7 for regions.

TABLE 19. TRAVEL TO WORK (a): REGION OF HOME BY REGION OF WORK, MELBOURNE STATISTICAL DIVISION (MSD), OCTOBER 1984
(⁰⁰⁰)

Region of home (MSD)	Region of work (MSD)					Total
	Central	North	East	South	West	
Central	59.4	6.9	4.0	7.9	6.4	84.6
North	69.1	125.5	7.9	*	15.8	221.4
East	96.4	13.1	130.2	39.5	5.2	284.4
South	71.7	5.1	23.7	161.4	*	265.2
West	54.5	14.8	*	*	64.8	136.2
Outside MSD	6.0	3.6	*	3.7	5.3	22.0
Total	357.2	169.0	170.7	216.0	100.9	1,013.8

(a) Excludes persons whose main mode of travel to work was given as 'other'.

NOTE. See map on page 7 for regions.

TABLE 20. TRAVEL TO SCHOOL (a): MAIN MODE OF TRAVEL, VICTORIA

Main mode of travel	May 1970		August 1974		October 1984	
	'000	Per cent	'000	Per cent	'000	Per cent
Train	25.5	3.2	29.5	3.6	31.3	3.7
Bus (b)	131.4	16.7	144.2	17.6	140.1	16.7
Tram	25.4	3.2	22.9	2.8	22.3	2.7
Car —						
As driver	9.9	1.3	19.2	2.3	47.7	5.7
As passenger	115.6	14.7	166.3	20.3	254.8	30.4
Motor cycle/scooter	n.a.	n.a.	*	*	*	*
Bicycle	92.2	11.7	72.1	8.8	78.8	9.4
Walk	383.4	48.7	362.2	44.1	262.4	31.3
Other	*	*	*	*	*	*
Total	786.8	100.0	820.8	100.0	839.6	100.0

(a) See footnote to Table 2.

(b) Includes school buses.

TABLE 21. TRAVEL TO SCHOOL: MODES OF TRAVEL (a), OCTOBER 1984 ('000)

Modes of travel	Melbourne Statistical Division	Rest of Victoria	Total Victoria
Train	34.4	*	34.8
School bus	31.6	67.5	99.1
Other bus	47.8	4.5	52.3
Tram	32.7	*	32.7
Car —			
As driver	40.2	10.2	50.3
As passenger	204.9	71.4	276.2
Bicycle	40.0	44.2	84.2
Walk	281.6	80.8	362.4
Other (b)	*	*	*

(a) A person can have used more than one mode.

(b) Includes taxi, motor cycle/scooter, and 'other' modes.

TABLE 22. TRAVEL TO SCHOOL: MAIN MODE OF TRAVEL BY TYPE OF ACADEMIC INSTITUTION, VICTORIA, OCTOBER 1984 ('000)

Main mode of travel	Type of academic institution			Total (c)
	Primary (a)	Secondary (a)	Tertiary	
Train	*	19.1	10.9	31.3
School bus	25.9	72.0	*	98.4
Other bus	4.5	31.4	5.5	41.7
Tram	*	15.7	4.1	22.3
Car —				
As driver	*	5.8	39.6	47.7
As passenger	170.3	77.3	6.3	254.8
Bicycle	23.7	53.3	*	78.8
Walk	162.2	96.5	3.6	262.4
Other (b)	*	*	*	*
Total	389.3	371.8	73.6	839.6

(a) Figures for primary and secondary school students were derived from age, with 5 to 11 years old allocated to primary, and 12 years old and over to secondary school. It is estimated that 6.5 per cent of 11 year old students turned 12 between July and October 1984, and thus the number of students in the secondary total is overstated, and the number in the primary total is understated accordingly. The secondary total includes 18,920 part-time students.

(b) Includes taxi, motor cycle/scooter, and 'other' modes.

(c) Totals include approximately 5,000 persons whose type of academic institution was not specified.

TABLE 23. TRAVEL TO SCHOOL: MAIN MODE OF TRAVEL BY DISTANCE TRAVELLED, OCTOBER 1984
(^{'000})

Main mode of travel	Distance travelled							Total
	Less than 500 m	500 m to less than 1 km	1 km to less than 2 kms	2 kms to less than 5 kms	5 kms to less than 10 kms	10 kms or more	Do not know	
MELBOURNE STATISTICAL DIVISION								
Train	*	*	*	*	7.2	19.8	*	31.1
School bus	*	*	*	9.4	9.1	10.5	*	31.2
Other bus	*	*	3.9	10.2	12.8	7.4	*	37.4
Tram	*	*	*	8.9	7.0	*	*	22.3
Car —								
As driver	*	*	*	6.1	13.4	15.4	*	38.2
As passenger	16.6	33.9	53.5	53.4	22.4	11.0	*	193.9
Bicycle	*	5.0	14.4	14.6	*	*	*	39.2
Walk	68.7	68.5	43.2	15.8	*	*	4.7	201.0
Other (a)	*	*	*	*	*	*	*	*
Total	88.1	109.6	119.0	121.0	74.8	67.5	15.6	595.5
REST OF VICTORIA								
Train	*	*	*	*	*	*	*	*
School bus	*	*	*	7.9	14.3	40.9	*	67.1
Other bus	*	*	*	*	*	*	*	4.3
Tram	*	*	*	*	*	*	*	*
Car —								
As driver	*	*	*	*	3.6	3.9	*	9.5
As passenger	4.7	14.0	15.2	18.5	5.2	*	*	60.8
Bicycle	6.4	11.0	11.7	9.3	*	*	*	39.6
Walk	29.0	22.9	7.4	*	*	*	*	61.4
Other (a)	*	*	*	*	*	*	*	*
Total	40.1	48.5	38.8	41.0	25.2	49.4	*	243.9
TOTAL VICTORIA								
Train	*	*	*	*	7.2	20.0	*	31.3
School bus	*	*	4.0	17.3	23.5	51.4	*	98.4
Other bus	*	*	4.6	12.2	13.2	8.7	*	41.7
Tram	*	*	*	8.9	7.0	*	*	22.3
Car —								
As driver	*	*	*	7.4	17.1	19.3	*	47.7
As passenger	21.3	47.9	68.7	71.9	27.6	14.2	*	254.8
Bicycle	8.5	16.0	26.1	23.9	*	*	*	78.8
Walk	97.7	91.4	50.6	17.7	*	*	4.9	262.4
Other (a)	*	*	*	*	*	*	*	*
Total	128.2	158.1	157.7	162.0	100.0	116.9	16.5	839.4

(a) Includes taxi, motor cycle/scooter, but excludes those who gave their main mode as 'other'.

**TABLE 24. TRAVEL TO SCHOOL: MAIN MODE OF TRAVEL BY AGE GROUP,
VICTORIA, OCTOBER 1984
('000)**

Main mode of travel	Age group (years)						Total
	5 to 9	10 to 12	13 to 14	15 to 17	18 to 19	20 and over	
Train	*	*	6.0	8.9	7.7	6.0	31.3
School bus	16.1	19.6	33.0	27.9	*	*	98.4
Other bus	*	6.4	9.9	15.9	3.7	3.7	41.7
Tram	*	*	5.4	7.6	*	3.8	22.3
Car —							
As driver	*	*	*	*	10.4	37.1	47.7
As passenger	132.3	56.2	27.0	30.1	5.4	3.7	254.8
Bicycle	12.0	21.5	20.1	21.5	*	*	78.8
Walk	104.4	79.1	35.0	36.2	3.9	3.8	262.4
Other (a)	*	*	*	*	*	*	*
Total	267.5	188.4	136.8	148.6	37.7	60.7	839.6

(a) Includes taxi, motor cycle/scooter, and 'other' modes.

**TABLE 25. MAJOR SHOPPING TRIP (a): MAIN MODE OF TRAVEL,
OCTOBER 1984
('000)**

Main mode of travel	Melbourne Statistical Division	Rest of Victoria	Total Victoria
Train	9.7	*	9.9
Community bus	*	*	*
Other bus	23.7	6.5	30.2
Tram	13.9	*	13.9
Taxi	3.8	*	6.0
Car —			
Household	621.6	256.6	878.2
Non-household	26.8	18.4	45.3
Walk	122.1	25.5	147.5
Other (b)	*	*	*
Total	825.9	311.8	1,137.7

(a) Of households that shopped last week.

(b) Includes motor cycle/scooter, bicycle, and 'other' modes.

**TABLE 26. MAJOR SHOPPING TRIP DAY (a): MAIN DEPARTURE TIME, VICTORIA,
OCTOBER 1984**

Shopping day	Departure time									Total (b)
	Midnight to 5.59 a.m.	6.00 a.m. to 7.59 a.m.	8.00 a.m. to 9.59 a.m.	10.00 a.m. to 11.59 a.m.	Noon to 1.59 p.m.	2.00 p.m. to 3.59 p.m.	4.00 p.m. to 5.59 p.m.	6.00 p.m. to 7.59 p.m.	8.00 p.m. to 11.59 p.m.	
Monday	*	*	10.2	14.6	6.9	6.5	5.2	*	*	45.5
Tuesday	*	*	13.3	22.8	9.1	8.4	8.2	*	*	64.3
Wednesday	*	*	23.2	57.4	26.1	19.6	21.1	7.9	*	156.3
Thursday	*	*	49.2	102.7	51.5	51.1	59.3	42.6	*	362.8
Friday	*	3.6	49.3	106.6	50.1	61.1	68.7	39.8	*	382.9
Saturday	*	6.2	58.9	47.7	*	*	*	*	*	116.3
Sunday	*	*	*	*	*	*	*	*	*	*
Do not know	*	*	*	*	*	*	*	*	*	8.0
Total	4.7	11.4	204.5	357.4	146.4	148.2	163.0	94.8	5.4	1,137.7

(a) Of households that shopped last week.

(b) Includes a small number of 'unknown'.

**TABLE 27. TYPE OF HOUSEHOLD BY FREQUENCY OF SHOPPING TRIPS, VICTORIA,
OCTOBER 1984
('000)**

Household type	Frequency of shopping trips					Total
	Two or more times per week	Once per week	Once per fortnight	Once per month	Other (a)	
Person living alone	48.3	133.3	27.6	3.9	35.9	248.9
Married couple —						
Only	50.7	192.4	28.3	*	16.1	290.4
Living only with their unmarried child(ren) aged 15 and over	30.9	108.9	9.2	*	5.6	155.0
Living only with their child(ren) aged 0-14	39.1	219.8	52.5	7.0	7.6	326.1
Living only with their child(ren) aged 0-14, and their unmarried child(ren) aged 15 or over	16.1	78.6	10.4	*	*	108.6
One person living only with —						
His/her unmarried child(ren) aged 15 or over	7.7	29.9	3.6	*	*	44.8
His/her child(ren) aged 0-14	*	15.0	9.4	*	*	28.8
His/her child(ren) aged 0-14 and his/her unmarried child(ren) aged 15 or over	*	9.2	*	*	*	14.2
All other households	23.2	99.6	18.9	*	11.8	156.4
Total	221.1	886.7	162.6	18.5	84.3	1,373.3

(a) Includes 'irregularly', 'do not know', and 'other'.

**TABLE 28. OTHER PLACES VISITED (a) DURING MAJOR SHOPPING TRIP, OCTOBER 1984
('000)**

Other places visited	Melbourne Statistical Division	Rest of Victoria	Total Victoria
Library	28.4	12.5	40.9
Post office	111.1	66.5	177.6
Commonwealth Employment Service	*	*	4.8
Council offices	3.8	*	6.1
Welfare/medical centre	12.8	13.0	25.7
Bank	225.5	119.7	345.2
Community centre	*	*	3.8
Other	26.0	23.0	49.0
No places visited	536.4	156.5	692.9

(a) A person may have visited more than one other place during the major shopping trip.

**TABLE 29. PUBLIC TRANSPORT TRIPS (a), VICTORIA,
OCTOBER 1984
('000)**

Reason for travel	Public transport trips
<i>ON REFERENCE DAY</i>	
Work	206.5
School	119.8
<i>DURING REFERENCE WEEK</i>	
Main grocery shopping	53.9
Other shopping	15.9
Employer's business	6.8
Health and medical	16.4
Recreational and entertainment	25.9
Personal business	34.9
Visiting family/friends	22.3
Other	11.4

(a) A person can have used more than one mode.

TABLE 30. TRAVEL TO WORK BY PUBLIC TRANSPORT: WHY CAR NOT USED BY MAIN MODE OF TRAVEL, VICTORIA, OCTOBER 1984
(^{'000})

Reason	Main mode of travel			Total
	Train	Bus	Tram	
No car available	22.0	11.7	12.5	46.2
No licence/do not drive	20.1	13.2	5.3	38.6
Difficulty with parking	25.6	*	5.1	33.9
Dislike heavy traffic	12.8	*	*	13.9
Cost	17.0	*	*	19.7
Too far to drive	3.7	*	*	3.7
Other	7.4	*	*	11.4
Total	108.5	31.1	27.8	167.4

TABLE 31. TRAVEL TO WORK: WHY PUBLIC TRANSPORT NOT USED BY MAIN MODE OF TRAVEL, VICTORIA, OCTOBER 1984
(^{'000})

Reason	Main mode of travel				Total
	Car —		Taxi, motor cycle/scooter	Bicycle	
	As driver	As passenger			
Time taken	173.7	12.2	*	*	191.8
Cost	11.3	*	*	*	16.9
None available	256.0	26.4	5.3	10.1	297.8
Timetable unsuitable	79.8	12.0	*	*	97.2
Too many methods to use	96.5	7.0	*	*	106.6
Had company/government car	57.9	*	*	*	58.4
Needed car/bike for work	115.1	*	*	*	116.8
Needed car/bike after work	9.2	*	*	*	9.9
Not as comfortable	48.6	*	*	*	50.4
Destination close by	31.2	*	*	6.0	40.7
Car lift available	*	56.6	*	*	58.4
Other	41.2	*	*	*	48.0
Total	922.4	125.4	17.4	27.6	1,092.8

TABLE 32. TRAVEL TO SCHOOL BY PUBLIC TRANSPORT:
WHY CAR NOT USED BY MAIN MODE OF TRAVEL,
MELBOURNE STATISTICAL DIVISION, OCTOBER 1984
(^{'000})

Reason	Main mode of travel			Total
	Train	Bus	Tram	
No car available	13.0	16.8	11.2	41.2
No licence/do not drive	9.8	10.4	5.2	25.4
Too far to drive	*	*	*	3.9
Other	6.5	8.9	5.1	20.6
Total	31.1	37.4	22.3	90.8

TABLE 33. TRAVEL TO SCHOOL: WHY PUBLIC TRANSPORT NOT USED BY MAIN MODE OF TRAVEL, MELBOURNE STATISTICAL DIVISION, OCTOBER 1984
('000)

Reason	Main mode of travel			Total (a)
	Car —		Bicycle	
	As driver	As passenger		
Time taken	15.7	14.7	5.1	35.6
Cost	*	4.0	4.8	10.6
None available	3.7	54.9	10.4	69.5
Timetable unsuitable	*	4.1	*	8.0
Too many methods to use	7.6	5.5	*	15.1
Not as comfortable	*	*	*	5.2
Destination close by	*	26.6	12.8	40.4
Car lift available	*	67.2	*	67.5
Needed car/bicycle for work	*	14.0	*	18.5
Other	*	*	*	*
Total	38.2	193.9	39.2	272.5

(a) Includes a small number of motor cycles/scooters.

TABLE 34. TRAVEL TO WORK AND SCHOOL: TYPE OF TICKET (a): BY MAIN MODE OF TRAVEL, VICTORIA, OCTOBER 1984
('000)

Type of ticket	Main mode of travel			Total
	Train	Bus	Tram	
Weekly travel card	41.4	*	*	44.3
Yearly travel card	12.3	*	*	12.5
Rail weekly ticket	7.0	*	*	7.0
Periodical, other	4.0	*	*	5.1
Two section	*	*	3.5	6.5
Two hour neighbourhood	6.5	6.6	6.5	19.6
Daily travel card	26.2	14.0	16.2	56.3
Daily student concession	6.0	19.0	8.2	33.2
Student weekly	3.7	*	*	4.7
Student pass	17.1	11.1	8.9	37.1
Daily ex-metropolitan	*	6.8	*	7.1
Free travel	9.0	*	*	12.5
Other (b)	4.2	6.7	*	12.6
Do not know	*	*	*	4.4
Total	139.8	72.8	50.1	262.7

(a) Includes a small amount of double counting because some persons travelled to both work and school using the same ticket.

(b) Includes daily other, periodical ex-metropolitan, and student concessions.

TABLE 35. NUMBER OF VEHICLES PARKED OVERNIGHT AT HOUSEHOLDS, OCTOBER 1984
('000)

Number of vehicles	Households		
	Melbourne Statistical Divison	Rest of Victoria	Total
GOVERNMENT AND/OR COMPANY VEHICLES			
1	103.9	31.0	134.9
2	19.9	5.9	25.8
3 or more	3.5	*	4.1
Total	127.3	37.5	164.8
PRIVATELY OWNED VEHICLES			
None	180.4	53.7	234.1
1	442.5	173.9	616.4
2	284.2	117.9	402.1
3	53.5	31.8	85.3
4 or more	19.8	15.6	35.4
Total	980.4	392.9	1,373.3

TECHNICAL NOTES

The figures contained in this publication are estimates based on a sample of approximately 6,200 households in Victoria. These estimates may differ from the figures that would have been produced if all households in Victoria had been sampled. One measure of the reliability of an estimate is known as its 'standard error'.

There are about two chances in three (67 per cent) that an estimate will differ by less than one standard error from the figure that would have been obtained if all households had been included in the survey. There are about nineteen chances in twenty (a 95 per cent chance) that the difference will be less than two standard errors.

Estimates below 3,500 are excluded from this publication (and are replaced with a *) because they are subject to high standard errors relative to the size of the estimate. Although figures for these small components can in some cases be derived by subtraction they should not be regarded as reliable.

A standard error expressed as a percentage of the estimate is known as 'relative standard error'. For example, if an estimate of 4,000 has a standard error of 1,000 then the estimate has a relative standard error of $\frac{1,000}{4,000} \times 100 = 25$ per cent. The relative standard error is a useful measure in that it provides an immediate indication of the percentage errors likely to have occurred due to sampling.

Readers should note that the standard errors for the Melbourne Statistical Division and the Rest of Victoria are approximately the same as for Victoria as a whole.

An example of the calculation and use of standard errors is given below:

In October 1984, there were an estimated 106,900 persons who travelled to work as a passenger in a car in the Melbourne Statistical Division. Referring to Table A, an estimate of 106,900 has a standard error of 3,700.

There are therefore two chances in three that the number that would have been produced if all households had been included in the survey lies between $(106,900 - 3,700 = 103,200)$ and $106,900 + 3,700 = 110,600$. There are nineteen chances in twenty that the number lies between $106,900 - (2 \times 3,700) = 99,500$ and $106,900 + (2 \times 3,700) = 114,300$.

The reliability of an estimated percentage, or rates calculated using sample data for both numerator and denominator, depends on the size of both the numerator and denominator; however, the relative standard error of the estimated percentage or rate will generally be slightly lower than the relative standard error of the estimate of the numerator. The relative standard error of the numerators can be obtained from Table A.

TABLE A. STANDARD ERROR OF ESTIMATES, TRAVEL TO WORK, SCHOOL, AND SHOPS, VICTORIA, OCTOBER 1984

Size of estimate ('000)	Standard error of estimate	Relative standard error (per cent)	There are about two chances in three that the actual population figure will fall in the range ('000)	There are about nineteen chances in twenty that the actual population figure will fall in the range ('000)
3.5	0.9	25.7	2.6 - 4.4	1.7 - 5.3
4.0	1.0	25.0	3.0 - 5.0	2.0 - 6.0
4.5	1.0	22.2	3.5 - 5.5	2.5 - 6.5
5.0	1.1	22.0	3.9 - 6.1	2.8 - 7.2
6.0	1.2	20.0	4.8 - 7.2	3.6 - 8.4
10.0	1.5	15.0	8.5 - 11.5	7.0 - 13.0
20.0	2.0	10.0	18.0 - 22.2	16.0 - 24.0
50.0	2.9	5.8	47.1 - 52.9	44.2 - 55.8
100.0	3.7	3.7	96.3 - 103.7	92.6 - 107.4
200.0	4.8	2.4	195.2 - 204.8	190.4 - 209.6
300.0	5.5	1.8	294.5 - 305.5	289.0 - 311.0
500.0	6.5	1.3	493.5 - 506.5	487.0 - 513.0
1,000.0	8.1	0.8	991.9 - 1,008.1	983.8 - 1,016.2
2,000.0	9.9	0.5	1,990.1 - 2,009.9	1,980.2 - 2,019.8

APPENDIX A. LOCAL GOVERNMENT AREAS IN EACH REGION OF THE MSD

Central

Collingwood (C)
 Fitzroy (C)
 Melbourne (C)
 Port Melbourne (C)
 Prahran (C)
 Richmond (C)
 St Kilda (C)
 South Melbourne (C)

West

Altona (C)
 Essendon (C)
 Footscray (C)
 Keilor (C)
 Melton (S)
 Sunshine (C)
 Werribee (S)
 Williamstown (C)

North

Broadmeadows (C)
 Brunswick (C)
 Bulla (S)
 Coburg (C)
 Diamond Valley (S)
 Eltham (S)
 Heidelberg (C)
 Northcote (C)
 Preston (C)
 Whittlesea (S)

East

Box Hill (C)
 Camberwell (C)
 Croydon (C)
 Doncaster and Templestowe (C)
 Hawthorn (C)
 Healesville (S)(p)
 Kew (C)
 Knox (C)
 Lillydale (S)
 Nunawading (C)
 Ringwood (C)
 Sherbrooke (S)
 Waverley (C)

South

Berwick (C)
 Brighton (C)
 Caulfield (C)
 Chelsea (C)
 Cranbourne (S)(p)
 Dandenong (C)
 Flinders (S)
 Frankston (C)
 Hastings (S)
 Malvern (C)
 Moorabbin (C)
 Mordialloc (C)
 Mornington (S)
 Oakleigh (C)
 Pakenham (S)(p)
 Sandringham (C)
 Springvale (C)

(C) City; (S) Shire; (p) part in Melbourne Statistical Division